

Report - SD2150 - 2017-06-22

Respondents: 1 Answer Count: 1 Answer Frequency: 100.00 %

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis carried out by (name, e-mail):

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COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

The course spans over 2 periods. In the first period the course participants are supposed to learn and exercise,

- structure dynamics fundamentals experimental methods to acquire necessary data and
- · process data to extract structure dynamic models.

In the second period the participants work in project groups with an industrial test object.

The course material consists of

- · a compendium,
- · a small collection of exercises
- a set of video-clips accessed via Scalable-learning

Learning activities:

The idea is to use learning activities that promotes participant activity and collaboration among participants.

Activities promoting learning of basic theory are

- prepare for class seminar with video-clips including short quizzes and material from compendium.
 class seminars with key concepts discussion and demonstrations
- problem solving home assignments
- · reporting experimental investigations.

Activities promoting practical experimental skills are

- two laboratory exercises and
- a project on an industrial test object

The examination consists of three parts:

- · Computer and laboratory exercises, Pass/Fail. Pass requires participation in data acquisition, data processing and reporting with sufficient quality.
- Project, P/F. Pass requires participation in data acquisition, data processing and reporting.
- Oral or written examination, A F. Examines participant's ability to understand, explain and use structure dynamic concepts and models. Final grade equal to grade on oral or written examination.

Since previous course offering,

- the video-clips have been improved and extended to cover the full course,
- Scalable-learning have been introduced as a platform for learning via video-clips,
- a written examination has replaced the oral.



THE STUDENT'S WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

The average weekly workload among course participants who answered the questionnaire is 7-9 h. This is substantially lower than expected considering the course credits 9 hp. From responses given in the questionnaire one important reason is the heavy workload in other courses.

THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

The participants' learning results are very good. Compared to previous years the number of participants with excellent results are high. Hopefully this is due to the improved and extended collection of video-clips supporting the compendium. Another reason is that the number of top class participants was higher than usual.

OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

From the average learning experience polar diagram the learning experience is good. The polar diagram is with small variation centered around 6,1 - 6,2 with minimum 5,5 and maximum 6,6.

ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?

Answers and comments to statement 8 and 13 show that information on course organization and requirements has to be improved.

- Strong aspects of the course are • interesting issues ... (statement 1)
- collaboration and togetherness ... (statements 6 and 21)
 conceptual understanding is given high priority ... (statement 11)

ANSWERS TO OPEN QUESTIONS

What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?

Open question responses indicate a number of positive course aspects,

- the course design with focus on student activities and student collaboration is highly appreciated,
- the video-clips are informative and useful,
- the practical laboratory activities are highly appreciated,
- · the project with test object from industry

Suggestions for improvement were,

- · information on course organisation and requirements,
- · include project in final grade,
- preparatory exercise on vibration animation,
- · more problem solving exercises are needed,
- · update the compendium,
- · replace the test object in lab exercise 2,
- add a part discussing and exercising the applications of structure dynamic models in the end of the course.

- Come to class, prepare by looking at recommended video-clips. This helps you to get the most out of discussion in class.
- Work with material in groups and focus on understanding fundamental concepts.
 Work continuously with the course Do not postpone to the last weeks.



PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term?

- Aspects of the course to develop:

 Improve/clarify course information. In particular course organisation and requirements. Highlight course organisation and requirements regularly during the course.

 Revise the compendium. In particular make the compendium consistent with the video-clips.

 Introduce a vibration animation exercise.

Course data 2017-06-22

SD2150 - Experimental Structure Dynamics, Project Course, VT 2017

Course facts

Course start:	2017 w.3
Course end:	2017 w.23
Credits:	9,0
Examination:	LABA - Computer and Laboratory Excercises, 3.0, Grading scale: P, F LABB - Project, 3.0, Grading scale: P, F TENA - Oral Examination, 3.0, Grading scale: A, B, C, D, E, FX, F
Grading scale:	A, B, C, D, E, FX, F

Staff

Examiner:	Hans Bodén <hansbod@kth.se></hansbod@kth.se>
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Assistants:	

Number of students on the course offering

First-time registered:	45
Total number of registered:	45

Achievements (only first-time registered students)

71.10%
81.50%
A 25% (8)
B 22% (7)
C 16% (5)
D 16% (5)
E 22% (7)

- 1 Percentage approved students
- 2 Percentage achieved credits
- 3 Distribution of grades among the approved students